drug in subsequent cases would seem indicated. Parenteral administration of trypsin was carried out on the supposition that it might decrease the viscosity of the infected material and thus promote drainage and also allow the therapeutic agents to penetrate into the involved tissue. The estrogen-androgen combination was used for the fungistatic effect[5,6,8] as well as for the anabolic properties those hormones possess.

Although no conclusion is drawn from this one case, it is felt therapy of this type deserves further consideration in the treatment of coccidioidomycosis and other deep mycotic diseases.

SUMMARY

In a case of disseminated coccidioidomycosis with monoarticular involvement, full remission of symptoms and signs of local and widespread involvement occurred coincident with combined estrogen-androgen-trypsin therapy.

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REFERENCES

1. Fiese, M. J., et al: Disseminated coccidioidomycosis, Calif. Med., 80:349-356, May 1954.

2. Gephardt, M. C., et al: Treatment of disseminated coccidioidomycosis with stilbamidine, J. Okla. M. Assn., 47:55-58, Feb. 1954.

3. Gordon, L. E., et al: Sensitivity of coccidioides immitis to 2-hydroxystilbamidine and the failure of the drug in the treatment of experimental coccidioidomycosis, J. of Lab. and Clin. Med., 43:942-945, June 1954.

4. Jillson, O. F.: Mycology, a review, New Eng. J. of Med., 249:13-14, 1953.

5. Lamb, J.: Combined therapy of histoplasmosis and coccidioidomycosis-methyltestosterone and sulfas, Arch. of Derm. and Syph., 70:695-712, Dec. 1954.

6. Piper, Wm. N.: Two treatment failures using diethylstilbestrol in treatment of coccidioidomycosis, Arch. of Derm. and Syph., 70:809-812, Dec. 1954.

7. Prior, J. A.: Experiences with histoplasmosis, Ann. of Int. Med., 40:221-225, 1954.

8. Reiss, F.: Steroid hormones; their fungistatic and genestatic effect on pathogenic fungi, Arch. of Derm. and Syph., 59:405-413, April 1949.

Anaphylactoid Reaction to Intramuscular Tetracycline Hydrochloride

Report of a Case

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So far as could be determined, there had been, until the present case, no reports of reactions of a major type to intramuscular tetracycline hydrochloride.

A 43-year-old gardener was first observed May 10, 1955, with swelling of the left cheek that had begun about seven days previously, following a bite by an insect (possibly a spider, the patient thought). The swelling increased gradually, the patient said, and he had applied hot soaks once or twice.

Upon examination a swelling on the left cheek—a firm lump about two inches in diameter lying beneath the subcutaneous tissue and anterior to the parotid gland—was noted. Surrounding it was an erythematous area about three inches in diameter. The swollen area was only moderately tender. On close inspection a small area of grayish skin with a punctate depression in the center was noted. Lymph nodes both anterior and posterior to the lobe of the ear were considerably enlarged, and less so down the anterior cervical chain. The enlarged nodes were slightly tender.

A year previously the patient had received injections of procaine penicillin and streptomycin and had been given erythromycin, penicillin (Bicillin®) and sulfonamides by mouth for a severe upper respiratory tract infection, without reaction.

A diagnosis of insect bite with secondary infection was made. The probability of Staphylococcus invasion secondary to the mild skin necrosis was considered and 100 mg. of tetracycline hydrochloride mixed with distilled water was injected into the gluteal muscle after the usual attempt at aspiration was made. The patient complained of severe pain upon injection, and afterward said that he could feel the pain travel throughout his body. He immediately felt slightly faint and in less than 20 seconds was unconscious. He was placed on an examining table. No heart beat could be heard nor pulse felt. The breathing was gasping. A blood pressure cuff was placed on the patient's arm, but tonic convulsion occurred before it could be inflated, and clonic convulsion swiftly followed. In a few seconds the patient struggled to get off the table, shouting, "Let me out of here." After another few seconds he regained consciousness and asked what had happened. The blood pressure then was 130/80 mm. of mercury. In the next half hour the systolic pressure dropped to 110 and the patient complained of increasing weakness, lethargy and nausea. Epinephrine and mephentermine were given subcutaneously and the blood pressure rose moderately. Epinephrine was given again when the pressure began dropping about an hour later. After about three hours from the time of injection of tetracycline hydrochloride the patient felt strong enough to walk out of the office, severe nausea having been relieved meanwhile by moderate emesis of the previous meal.

The next day the patient felt slightly weak but by the following day he was able to return to his usual occupation as gardener. Later a moderately large amount of caseous material drained from the swollen area on the cheek, with immediate relief of swelling and discomfort.

Submitted June 13, 1955.

A few weeks later a skin test for procaine sensitivity was performed and an area of induration 8 mm. in diameter with erythema 10 mm. in diameter developed.

The manufacturers (Pfizer Laboratories) of the tetracycline hydrochloride injected into the patient in this case examined a remaining portion of the material injected, as well as the contents of a vial from the same lot, and found no defect.[1]

DISCUSSION

There are numerous reported cases of reaction to parenteral injection of penicillin. The present report of anaphylactoid reaction to the parenteral injection of another antibiotic, tetracycline hydrochloride, serves to illustrate the possibility of such a reaction to practically any parenteral medication, especially in the presence of procaine.

SUMMARY

A case in which anaphylactoid shock followed intramuscular injection of tetracycline hydrochloride in a procaine-sensitive patient is reported. It is believed to be the first report of such reaction to that antibiotic.

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REFERENCE

1. Dumas, Kenneth J., Pfizer Laboratories: Personal communication.

Mumps Meningoencephalitis

Report of an Unusual Case

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THE COMPLICATIONS OF MUMPS in childhood are few and usually unimportant. In adolescence, however, they are occasionally severe. Meningitis is not a rare complication, and meningeal symptoms occasionally appear before or in the absence of parotid swelling, which may make the diagnosis obscure or difficult to establish except in the presence of confirmatory laboratory data. This complication more often occurs during epidemics, and associated with it are sudden high fever, headache, nuchal rigidity and Kernig's sign—these symptoms usually appearing near the end of the first week. Mental changes and delirium may be evident from the onset. The spinal fluid is under increased pressure but usually clear, with a predominance of lymphocytes present and a normal sugar content. Most patients recover spontaneously and death is rare. Symptoms may be relieved by lumbar puncture. Other treatment is symptomatic.

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REPORT OF A CASE

The patient, a white boy 15 years of age, was admitted to the Communicable Disease Unit of the Los Angeles County General Hospital on May 7, 1952. He had been well until, two days before admission, he awoke in the morning with a throbbing frontal headache and a fever of 102° F. orally. There was associated bilateral orbital pain and vomiting. Neither the neck nor the back was stiff and there were no voice changes. The symptoms persisted and a physician was consulted. A lumbar tap was done. The fluid was clear and it contained 900 cells per cu. mm.—95 per cent lymphocytes. The patient was admitted to the hospital, where he rapidly grew worse. The past history was significant in that the boy had definitely had varicella and measles, but was not sure about mumps. The remaining history was not contributory.

Upon admittance the patient was observed to be uncomfortable but alert, and the oral temperature was 102° F. There was questionable redness at the openings of Stensen's ducts and a slight inflammation of the pharynx. The parotid and cervical nodes were not enlarged, and no nuchal, back or hamstring spasm was observed. The reflexes including the superficial were all present and physiological. The spinal fluid pressure was higher than normal and it contained 847 cells per cu. mm.—92 per cent lymphocytes. Results of qualitative tests for sugar and protein content were within normal limits. Leukocytes in the blood numbered 7,400 per cu. mm.—64 per cent polymorphonuclear cells.

The symptoms abated almost immediately following complete bed rest. The temperature was normal on the fourth hospital day and there were no complaints thereafter. Lumbar taps were done repeatedly, revealing pleocytosis in all instances. The fluid was always sterile and chemical constituents were within normal limits. Exhaustive laboratory diagnostic studies were made and a complement fixation test for mumps finally provided the diagnosis. A specimen of the patient's blood had been sent to the laboratory at the time of admittance and the report of "1:8 for mumps" was subsequently received with instructions to repeat the test in approximately ten days. On May 19, another specimen was sent to the laboratory and this time a report of "1:32—positive for mumps" was received. The patient was discharged on the twenty-first hospital day.

COMMENT

It has been shown, especially by Enders and Kane[1, 2] that during an attack of mumps a specific antibody appears in the serum which has the capacity to fix complement in the presence of an antigen derived from the parotid gland of a monkey previously inoculated with the virus. This antibody is usually demonstrable by the fourteenth day following onset. Therefore, the complement fixation test might be of value in differentiating mumps meningoencephalitis from other forms of acute aseptic